

CLAIM AMENDMENTS:

1. (currently amended) A connector, comprising:

first and second housings ~~(20, 10)~~ connectable with each other,

a movable member ~~(40)~~ formed with a cam groove ~~(44)~~ and movably provided on the first housing ~~(20)~~,

a cam pin ~~(13)~~ provided on the second housing ~~(10)~~,

the housings ~~(20, 10)~~ being pulled toward each other to be properly connected as the movable member ~~(40)~~ is moved from an initial connection position ~~(ICP)~~ where the housings ~~(20, 10)~~ are fit lightly together while the cam pin ~~(13)~~ is engaged with the cam groove ~~(44)~~,

an erroneous connection preventing means ~~(32, 16)~~ for preventing the connection of the housings ~~(20, 10)~~ at a preventing position ~~(PP)~~ which is located before the initial connection position ~~(ICP)~~ and where at least a part of the cam pin ~~(13)~~ is located in the cam groove ~~(44)~~ upon erroneously connecting the two housings ~~(20, 10)~~, and

a push-back surface ~~(49; 50)~~ at an opening edge ~~(44A)~~ of the cam groove ~~(44)~~ and capable of exerting a force ~~(F1)~~ on the cam pin ~~(13)~~ at the preventing position ~~(PP)~~ and in a direction to separate the housings ~~(20, 10)~~, the push-back surface ~~(49; 50)~~ being configured such that the force ~~(F1)~~ is larger than a frictional resistance between the housings ~~(20, 10)~~.

2. (currently amended) The connector of claim 1, wherein the movable member ~~(40)~~ is a lever ~~(40)~~ rotatably provided on the first housing ~~(20)~~.

3. (currently amended) The connector of claim 1, wherein a contacting direction ~~(F)~~ of the push-back surface ~~(49; 50)~~ with the cam pin ~~(13)~~ defines an angle of no more than about 45° to a connection axis ~~(CD)~~ of the housings ~~(20, 10)~~.

4. (currently amended) The connector of claim 1, wherein the push-back surface ~~(49, 50)~~ comprises a convex surface ~~(50)~~.

5. (currently amended) The connector of claim 1, wherein the cam pin ~~(30)~~ contacts the push-back surface ~~(49, 50)~~ at a point of tangency upon erroneously connecting the two housings ~~(20, 10)~~, a line ~~(F)~~ passing centrally through the cam pin ~~(30)~~ at the point of tangency defines an angle of no more than about 45° to a connection axis ~~(CD)~~ of the housings ~~(20, 10)~~.

6. (currently amended) The connector of claim 1, wherein the erroneous connection preventing means ~~(32, 16)~~ comprises at least one groove ~~(17)~~ and at least one rib ~~(32)~~ which is insertable into the groove ~~(17)~~ upon proper connection of the two housings ~~(20, 10)~~.

7. (original) A set of connectors comprising at least two connectors according to claim 6.

8. (currently amended) The set of connectors of claim 7, wherein positions of the rib ~~(32)~~ and the groove ~~(17)~~ differ for each pair of housings among a set of connectors so that the housings can be connected only in a correct combination.

9. (currently amended) A connector, comprising:

first and second housings ~~(20, 10)~~ connectable with each other along a connecting direction ~~(CD)~~, a cam pin ~~(13)~~ provided on the second housing ~~(10)~~;

a lever ~~(40)~~ mounted on the first housing ~~(20)~~ for rotation in a connection rotation direction ~~(CRD)~~, the lever ~~(40)~~ having a cam groove ~~(44)~~ configured for engaging the cam pin ~~(13)~~ when the housings ~~(20, 10)~~ are fit lightly together at an initial connection position ~~(ICP)~~ and pulling the housings ~~(20, 10)~~ towards each other as the lever ~~(40)~~ is rotated in the connection rotation direction ~~(CRD)~~; and

a push-back surface ~~(49; 50)~~ at an opening edge ~~(44A)~~ of the cam groove ~~(44)~~ and at a trailing side of the cam groove ~~(44)~~ relative to the connection rotation direction ~~(CRD)~~, the push-back surface ~~(49; 50)~~ being configured and disposed for exerting a force ~~(F1)~~ on the cam pin ~~(13)~~ in a direction opposite the connecting direction ~~(CD)~~ if the lever ~~(40)~~ is rotated in the connection rotation direction ~~(CRD)~~ before the housings ~~(20, 10)~~ reach the initial connection position ~~(ICP)~~, the push-back surface ~~(49; 50)~~ further being configured such that the force ~~(F1)~~ is larger than a frictional resistance between the housings ~~(20, 10)~~.

10. (currently amended) The connector of claim 9, further comprising an erroneous connection preventing means ~~(32, 16)~~ for permitting connection of two properly matched housings ~~(20, 10)~~ and preventing connection of two improperly matched housings ~~(20, 10)~~ at a preventing position ~~(PP)~~ which is located before the initial connection position ~~(ICP)~~ and where only a part of the cam pin ~~(13)~~ is in the cam groove ~~(44)~~.

11. (currently amended) The connector of claim 9, wherein at least part of the push-back surface ~~(50)~~ is convex.

12. (currently amended) The connector of claim 9, wherein the cam pin ~~(30)~~ contacts the push-back surface ~~(49, 50)~~ at a point of tangency, a line ~~(F)~~ passing centrally through the cam pin ~~(30)~~ and through the point of tangency defines an angle of no more than about 45° to the connection direction ~~(CD)~~ of the housings ~~(20, 10)~~.

13. (currently amended) A connector, comprising:

first and second housings ~~(20, 10)~~ connectable with each other along a connecting direction ~~(CD)~~, a cam pin ~~(13)~~ provided on the second housing ~~(10)~~;

a movable member ~~(40)~~ mounted on the first housing ~~(20)~~ for movement in a movement direction at an angle to the connecting direction, the lever ~~(40)~~ having a cam groove ~~(44)~~ configured for engaging the cam pin ~~(13)~~ when the housings ~~(20, 10)~~ are fit

lightly together at an initial connection position ~~(ICP)~~ and pulling the housings ~~(20, 10)~~ towards each other as the lever ~~(40)~~ is moved in the movement direction ~~(CRD)~~; and

a push-back surface ~~(49; 50)~~ at an opening edge ~~(44A)~~ of the cam groove ~~(44)~~ and at a trailing side of the cam groove ~~(44)~~ relative to the movement direction, the push-back surface ~~(49; 50)~~ being configured and disposed for exerting a force ~~(F1)~~ on the cam pin ~~(13)~~ in a direction opposite the connecting direction ~~(CD)~~ if the movable member ~~(40)~~ is rotated in the connection rotation direction ~~(CRD)~~ before the housings ~~(20, 10)~~ reach the initial connection position ~~(ICP)~~, the push-back surface ~~(49; 50)~~ further being configured such that the force ~~(F1)~~ is larger than a frictional resistance between the housings ~~(20, 10)~~.

14. (currently amended) The connector of claim 13, further comprising an erroneous connection preventing means ~~(32, 16)~~ for permitting connection of two properly matched housings ~~(20, 10)~~ and for preventing connection of two improperly matched housings ~~(20, 10)~~ at a preventing position ~~(PP)~~ which is located before the initial connection position ~~(ICP)~~ and where only a part of the cam pin ~~(13)~~ is in the cam groove ~~(44)~~.

15. (currently amended) The connector of claim 14, wherein at least part of the push-back surface ~~(50)~~ is convex.